

Certifications To-Do List for Escape Plan

Gerald

November 10, 2024

Legend

- ★ **Green** Free
- ★ **Yellow** Trial and Trial periods
- ★ **Orange** Paid

Certifications for CV Enhancement

Essential Certifications

- ☐ **Bioinformatics Specialization by UC San Diego (Coursera: \$49/month)**
Core bioinformatics tools and techniques: genome assembly, sequence alignment.
- ☐ **Nextflow Training (Sequera Labs: \$200)**
Workflow orchestration for scalable genomic pipelines.
- ☐ **Microsoft Certified: Azure Data Engineer Associate**
Cloud resources for large-scale data processing.
- ☐ **Python for Everybody (Coursera, Free with Audit)**
Python programming fundamentals for data analysis and automation.
- ☐ **Linux Foundation Certified Engineer (LFCE) (\$300)**
Advanced Linux skills for workflow automation.
- ☐ **Google Project Management Certificate**
Covers Agile, Scrum, and project lifecycle.
- ☐ **Successful Negotiation: Essential Strategies (Coursera, Free)**
Communication and persuasion skills.
- ☐ **Business Foundations Professional Certificate (Wharton School, edX: \$149/month)**
Essentials of business decision-making, leadership, and financial acumen.

Robust Certifications

- ☐ **Harvard Medical School: Reproducible Science**
Emphasizes computational rigor and statistical tools.
- ☐ **DeepLearning.AI TensorFlow Developer Certificate**
Master TensorFlow and apply machine learning to bioinformatics datasets.
- ☐ **Google Cloud Professional Data Engineer (\$125 for exam)**
Design and deploy scalable data solutions on Google Cloud.
- ☐ **EDX: Genomic Data Science by Johns Hopkins**
Introduction to tools like Galaxy, Python, and R for genomic analysis.
- ☐ **Certified Kubernetes Administrator (CKA) (\$375)**
Containerized workflow management and orchestration for scalable pipelines.

- ☐ **Coursera: Machine Learning by Stanford (Free Trial Available)**
Introduction to ML techniques and applications, taught by Andrew Ng.

Optional Certifications

- ☐ **AWS Certified Solutions Architect – Associate (\$150 for exam)**
Cloud-based solution design for scalability and efficiency.
- ☐ **Udemy: Python for Data Science and Machine Learning**
Practical Python skills for bioinformatics and data science applications.
- ☐ **Intro to Computational Biology (MIT OpenCourseWare)**
A foundational course covering algorithms and computational techniques in biology.
- ☐ **HubSpot Academy: Inbound Marketing Certification (Free)**
Teaches marketing basics, ideal for consulting gigs or promoting personal services.
- ☐ **Introduction to Business Management (University of Edinburgh, edX)**
General understanding of business operations and management.